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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,937

03/31/2004

Heiner Pitz

600.1306

7474

23280

7590

12/23/2004

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EXAMINER

WILLIAMS, KEVIN D

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,937

Applicant(s)

PITZ ET AL.

Examiner

Kevin D. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/31/04; 7/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Jung (US 2003/0066452).

With respect to claims 1-3, and 5, Jung teaches a method for drying a printing ink on a printing substrate in a printing press comprising the steps of using at least one printing ink to print 3 on the printing substrate at a first position of a path, the printing substrate being moved along the path through the printing press, applying a treatment agent 12 at a second position 7 of the path on the printing substrate to accelerate drying of the printing ink on the printing substrate, the printing substrate passing the first position chronologically before the second position (fig. 2), the treatment agent being applied in the form of a coating, where the treatment agent includes a siccative solution, an alkaline solution, or a binding agent (inherently includes a binding agent to bind the mixture) the substrate being dried by a heating device at a chronologically later point in time from the using and applying steps at at least one third position of the path.

With respect to claims 9 and 10, Jung teaches a printing press comprising at least one print unit 1 at a first position along a path of a printing substrate through the printing press, at least one drying device 8 at a third position along the path downstream from the print unit for supplying energy to the printing substrate, wherein at one further second position upstream from the drying device, the printing press includes a conditioning apparatus for applying a treatment agent 12 accelerating drying of the printing ink on the printing substrate at the third position, the printing substrate passing the first position chronologically after the second position where the treatment agent is applied in the form of a primer coating ([0034]), wherein the conditioning apparatus is designed to allow an application of the treatment agent from both sides onto the printing substrate (Fig. 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Rodi (US 5,115,741).

Jung teaches the claimed invention and a heating device 8, but does not provide a discussion of the particular type of heating device used, therefore Jung does not expressly disclose the printing substrate being dried by action of radiant energy, at least one narrow-band radiant energy source being a laser light source and emitting light of

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one wavelength in the near infrared region, the laser light source being a semiconductor laser, a gas laser, or a solid-state laser, the drying device having a plurality of radiant energy sources arranged in a one-dimensional field, a two-dimensional field, or a three-dimensional field with light striking the printing substrate at a number of positions, the light incident to the printing substrate at one position being controllable in its intensity and exposure duration for each radiant energy source independently of the other radiant energy sources, and a drying device including at least two radiant energy sources and the light from at least two radiant energy sources being incident to the printing substrate at one position.

Rodi teaches a printing substrate being dried by action of radiant energy 15, at least one narrow-band radiant energy source 15 being a laser light source and emitting light of one wavelength in the near infrared region, the laser light source being a semiconductor laser, a gas laser, or a solid-state laser 15, the drying device having a plurality of radiant energy sources (Fig. 3; 15) arranged in a one-dimensional field, a two-dimensional field, or a three-dimensional (fig. 3) field with light striking the printing substrate at a number of positions, the light incident to the printing substrate at one position being controllable in its intensity and exposure duration for each radiant energy source independently of the other radiant energy sources (col. 5, lines 12-20), and the drying device including at least two radiant energy sources and the light from at least two radiant energy sources being incident to the printing substrate at one position (Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jung to have the radiant energy device as taught by Rodi, in order to provide sufficient heat to the printed substrate to effectively dry to printed ink.

Allowable Subject Matter

5. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of the allowability of claim 6 is the limitation of the treatment agent including an infrared absorbed with an absorption wavelength resonant to the wavelength of the light, in combination with the other claimed steps.

Conclusion

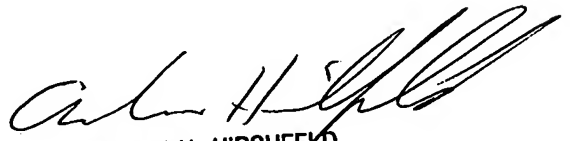
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (571) 272-2172. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDW
December 19, 2004



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